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Comments of ChargePoint, Inc.

On the U.S. Environmental Protection Agency's and National Highway Traffic Safety Administration's Notice of Proposed Rulemaking: The Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021-2026 Passenger Cars and Light Trucks

83 Fed. Reg. 42986

Docket Nos. NHTSA-2018-0067, EPA-HQ-OAR-2018-0823, NHTSA-2017-0069

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Submitted via Regulations.gov

ChargePoint, Inc. (ChargePoint) submits these comments in response to the Environmental Protection Agency's (EPA) and National Highway Traffic Safety Administration's (NHTSA) Notice of Proposed Rulemaking entitled "The Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021-2026 Passenger Cars and Light Trucks," Docket Nos. NHTSA-2018-0067 and EPA-HQ-OAR-2018-0823, 83 Fed. Reg. 42986 (August 24, 2018) (NPRM).

ChargePoint is the leading electric vehicle (EV) charging network in the world, with charging solutions in every category EV drivers charge, at home, work, around town and on the road. With more than 56,000 independently owned public and semi-public charging spots and thousands of customers (businesses, cities, agencies, and service providers), ChargePoint is the only charging technology company in the market that designs, develops, and manufactures hardware and software solutions across every use case. ChargePoint drivers have completed more than 43 million charging sessions, saving upwards of 45 million gallons of fuel, and driving more than 1 billion gas-free miles.

The U.S. transportation sector is undergoing a rapid, sustained, and beneficial transformation to electric drive technologies. As a result of over a decade of research, development, investment, and deployment in the emerging market for EVs, transportation electrification area of U.S. leadership in innovation. Federal and state policies to decrease emissions from transportation and increase deployment of electric vehicles and charging infrastructure have provided a solid foundation for our competitive industry to offer new products and more choices for consumers. To that end, carefully established vehicle standards, both at the Federal level and among the States, have supported market certainty and enabled the sustainable transition to electric fuel witnessed today. ChargePoint has and continues to support

strong, stable, long-term policies on fuel efficiency and emissions reduction that continue to foster investment and innovation in transportation electrification.

ChargePoint submits that policies and analyses in the NPRM undermine current trends in the automotive industry and would actively work against investment and innovation in the emerging electric vehicles sector. The NPRM freezes vehicle standards at 2020 levels through 2026 and proposes to revoke California's Clean Air Act (CAA) preemption waiver. Both measures would significantly damage the nascent market for EVs at a time of rapid growth nationwide. Furthermore, they pose a serious threat to state regulatory authority to curb harmful emissions and protect public health. Overall, ChargePoint strongly opposes the NPRM's proposals to rollback efficiency standards and programs for zero emission vehicles, as those proposals would negatively impact U.S. global leadership in advanced transportation technologies, public health, energy and fuel security, and the environment.

Current Trends in the Electric Vehicle Industry Must be Accurately Captured in the NPRM

The NPRM advances several spurious lines of argument on the rate of adoption of EVs and the costs of electric vehicles and battery components. Increased investments in these technologies today will continue to drive consumer awareness, choice of models, greater battery range, and a long-term sustained market for EVs. The NPRM cites "ongoing low sales volumes" of EVs, but that assertion is not borne out by the historic data and projected models on this emerging market.

The NPRM comes at a critical point in the development of the electric vehicle sector. The most recent data from the second quarter of 2018 show a year-over-year growth rate of 32% in EV registrations nationally.[1] Globally, major automakers have made several high-profile announcements to introduce dozens of electric vehicle models, investing billions in EV technologies worldwide. Overall, automakers have announced an estimated $90 billion in investment in electric models in the coming years. Ford has announced an $11 billion investment in to deploy 40 hybrid and all-electric models by 2022. Similarly, Volkswagen AG plans to spend $40 billion by 2030 to build electric versions of its models globally.[2] General Motors has a goal to introduce 20 electric vehicle models by 2023.[3]

More choices for consumers will mean greater adoption of electric vehicles that will only accelerate in the coming years. Several forecasts have projected the EV segment to experience growth over the coming decades. The International Energy Agency's outlook shows that global EV ownership will expand from 3 million vehicles in use in 2017 to over 125 million by 2030.[4]

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[1] IHS Polk, 2018.
[2] Paul Lienert. "Global carmakers to invest at least $90 billion in electric vehicles." Reuters (January 15, 2018). https://www.reuters.com/article/us-autoshow-detroit-electric/global-carmakers-to-invest-at-least-90-billion-in-electric-vehicles-idUSKBN1F42NW
[3] Jamie L. LaReau. "GM plans expanded Bolt productions, 20 new electric vehicles by 2023". Detroit Free Press (June 12, 2018). https://www.freep.com/story/money/cars/general-motors/2018/06/12/gm-plans-expanded-bolt-production-20-new-electric-vehicles-2023/685108002/
[4] International Energy Agency. "Global EV Outlook". (2018). https://webstore.iea.org/global-ev-outlook-2018

Another long-term outlook from Bloomberg New Energy Finance shows that EV sales will increase from a record 1.1 million worldwide in 2017 to 30 million in 2030. By 2040, annual sales will be roughly 60 million electric vehicles, representing 55% of all cars sold. That same forecast shows that upfront costs for EVs will be competitive with internal combustion engines starting in 2024.[5] Behind this trend is a steep decline in battery prices for vehicles, which according to some reports could drop as much as 70% by 2030.[6] Battery optimization of lithium-ion technologies will lower electric vehicle costs overall, bringing consumer prices for EVs below those of gas-powered cars within the timescale of the NPRM's effective policy change.

Supporting the rapid growth of electric vehicles will require a massive buildout of public charging infrastructure, and an entire charging industry has formed around that demand. The U.S. Department of Energy's Alternative Fuels Data Center shows that there are over 60,000 public charging ports around the nation and in all 50 states.[7] In addition, there are tens of thousands of charging stations that are for private use for fleets and workplaces. The electric vehicle charging industry is highly competitive, with many providers innovating and forming national partnerships to meet the growing needs of the market. Globally, the EV charging infrastructure industry is expected to expand at a compound annual growth rate of 47% from 2017 to 2025. Revenues from electric vehicle charging are projected to reach $276 million by 2020. Importantly, several EV charging providers are headquartered in the United States and develop products to deploy in the U.S. and abroad.[8]

As an example, ChargePoint develops, manufactures, and installs EV charging infrastructure in the U.S. and globally. From 2016 to 2017, the company increased deployments nearly 40%. In the last year, ChargePoint expanded facilities in the United States, set up new operations in Europe, designed new higher speed charging stations to accommodate future vehicle models, and signed groundbreaking agreements to enable easier transactions between charging networks. These developments show that the EV charging sector is tracking the expansive growth of electric vehicle adoption overall. Similar to automaker investments in electric vehicle models, EV charging companies have also drawn hundreds of millions of dollars in investment.[9]

Market data clearly show a vibrant, rapidly emerging market for EVs and charging infrastructure, where innovation and investment are increasingly taking place in the U.S. to meet the demands of American consumers. The NPRM does not accurately account for these trends, and uses the early-stage development of these technologies to unfairly characterize the market.

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[5] Bloomberg New Energy Finance. "Electric Vehicle Outlook 2018." (2018). https://about.bnef.com/electric-vehicle-outlook/
[6] Jeremy Hodges. "Electric cars may be cheaper than gas guzzlers in seven years." BNEF (March 22, 2018). https://www.bloomberg.com/news/articles/2018-03-22/electric-cars-may-be-cheaper-than-gas-guzzlers-in-seven-years
[7] Alternative Fuels Data Center. U.S. Department of Energy. (October 2018). www.afdc.energy.gov.
[8] Electric Vehicle Charging Association. "State of the Charge 2018." (May 2018). https://www.scribd.com/document/386761577/EVCA-StateOfChargeReport-2018#from_embed
[9] ChargePoint. "ChargePoint closes $43 million with funding from Seimens, bringing Series G round to $125 million and catapulting European expansion efforts". (June 29, 2017). https://www.chargepoint.com/about/news/chargepoint-closes-43-million-funding-siemens-bringing-series-g-round-125-million-and/

Revoking the California CAA Preemption Waiver would Significantly Damage the EV Market

While the NPRM's preferred approach is a wide-ranging reform of CAFE standards with major implications for the automotive sector nationally, our comments focus on one specific proposed action under the SAFE Vehicles Rule: the withdrawal of California's Clean Air Act Preemption Waiver. ChargePoint strongly opposes the proposed revocation of California's Waiver. Legal experts have already argued compellingly that EPA lacks the legal authority to revoke the waiver, but beyond the legal standard, ChargePoint would like to comment on the market impact of such an unprecedented move it is pursued.[10]

The Waiver, as well as its application in states around the country, has enabled significant and measurable improvements in public health and welfare, as intended in the 1970 Clean Air Act. The Waiver allows the State of California to regulate tailpipe emissions from the automotive sector more stringently than the federal government. Additionally, under the same provision in the CAA, other states may adopt California's standards, enabling California's effective emissions reduction policies to have nationwide impact. Fifteen states currently adopt California's rules, covering more than 40% of the U.S. population.

The proposal to revoke California's Waiver injects uncertainty into a steadily growing and innovative electric vehicle market. The Waiver underpins a wide variety of programs setting high ambition levels for standards, pushing industry to pursue new technologies and introduce them to market. This includes the critical Zero Emission Vehicle (ZEV) Program, which requires sales of electric cars and trucks in California and 9 other states. The ZEV program requirements have led automakers to introduce more EVs to market in states beyond California, providing consumers with electric model options at dealerships. Simply put, the California Waiver has enabled greater EV penetration in markets nationwide, allowing states and communities to reap the benefits of electrification.

If finalized, the SAFE Vehicles Rule preferred policy would nullify the ZEV program and stifle EV markets across the country at a time of rapid growth. As the ZEV states represent a significant percentage of the automotive market's sales, reversing this policy would have nationwide impact in limiting consumer options and suppressing electric vehicle adoption. Far from applying California's market alone, the effects of revoking the California Waiver would be felt in diverse markets that have already experienced tangible and beneficial growth as a result of adopted policies.

Due to the proposal to freeze fuel efficiency for vehicle model years after 2021, the effect of revoking California's Waiver would be magnified under the SAFE Vehicles Rule. The Rule would establish Federal fuel efficiency standards well below California's current standards, and it seeks a national standard that rolls back the advances made from California's programs. The ensuing legal process to litigate this possible outcome has already caused concern among States, industry, environmental advocates, and other stakeholders.

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[10] Institute for Policy Integrity. "EPA lacks legal authority to revoke California's 2013 waiver on vehicle emissions standards." (August 1, 2018). https://policyintegrity.org/files/media/CA_Waiver_report_release_080118.pdf

ChargePoint believes that the California Waiver is one of the most significant policies to advance a more efficient and innovative transportation sector. Policies like the ZEV Program have and continue to boost U.S. global leadership in advanced transportation technologies. ChargePoint opposes any effort to undermine California's well-established ability to set its own vehicle emissions standards and programs.

Conclusion

ChargePoint believes that the SAFE Vehicles Rule preferred approach would have an immediate and substantial chilling effect on the rapidly growing market for electric vehicles. The NPRM reveals an incomplete understanding of the electric vehicle marketplace, the extent of growing demand for electric vehicle technologies, and the trajectory of that market. EPA and NHTSA's policies should not be designed to stall the EV market, but rather seek to capture the value of electric vehicles in automaker fleets and widespread consumer adoption. Importantly, California's electrification policies represent landmark, foundational policies that signal greater investment and innovation in the EV sector. ChargePoint strongly recommends that EPA and NHSTA reconsider the preferred approach, protect California's Waiver Authority, and maintain policies to support electric vehicle markets

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